

IN THE CLAIMS

Upon entry of the present amendment, the status of the claims will be as is shown below. This listing of claims replaces all previous versions and listings of claims in the present application.

1-4 (Canceled)

5. (Currently Amended) A phase offset circuit for giving signed binary data a phase offset θ ($\theta=90x+y$: $x=0, \pm 1, \pm 2, \pm 3, \pm 4, 0 < y < 90$), comprising:

a sign inversion circuit that gives a phase offset of a multiple of 90° by inverting the sign of said signed binary data;

an amplitude adjustment circuit that adjusts the amplitude of the signal output from said sign inversion circuit; and

a phase shift calculation circuit that gives the signal output from said amplitude adjustment circuit a phase offset smaller than 90° .

6. (Original) The phase offset circuit according to claim 5,

wherein said phase shift circuit comprises a fixed phase offset section that gives a predetermined amount of a fixed phase offset, and

whether to output a signal with said fixed phase offset provided by said phase offset section or a signal without said fixed phase offset is selected according to a control signal.

7. (Original) A CDMA communication base station apparatus capable of controlling the phase and amplitude of a transmission signal through closed-loop control, comprising:

a phase offset circuit equipped with a sign inversion circuit that gives a phase offset of

a multiple of 90° by inverting the sign of a QPSK modulated signal, an amplitude adjustment circuit that adjusts the amplitude of the signal output from said sign inversion circuit and a phase offset circuit that gives the signal output from said amplitude adjustment circuit a phase offset smaller than 90° ; and

a transmission control section that provides phase control information to said phase offset circuit based on a message from a mobile station included in a reception signal.

8. (Currently Amended) The CDMA communication base station apparatus according to claim 7,

wherein said phase offset circuit further comprises a fixed phase offset section that gives a predetermined amount of a fixed phase offset, and

whether to output a signal with a fixed phase offset provided or a signal without said fixed phase offset is selected according to said phase control information given by said transmission control ~~means~~ section.

9. (Original) The CDMA communication base station apparatus according to claim 7, wherein control of the phase and amplitude can be performed for every transmit channel.

10. (Currently Amended) A closed-loop mode transmit diversity method that controls the phase and amplitude of a signal transmitted from an antenna based on a message from the other end of communication, comprising ~~the steps of~~:

giving a phase offset of a multiple of 90° by inverting the sign of a QPSK modulated signal;

adjusting the amplitude of the signal subjected to said sign inversion processing; and
giving a phase offset smaller than 90° to the signal subjected to said amplitude adjustment processing.

11. (Original) A phase offset circuit that gives a QPSK modulated signal a phase offset, comprising:

a sign inversion circuit that gives a phase offset of a multiple of 90° by inverting the sign of the QPSK modulated signal;

an amplitude adjustment circuit that adjusts the amplitude of the signal output from said sign inversion circuit; and

a phase shift calculation circuit that gives a phase offset smaller than 90° to the signal output from said amplitude adjustment circuit.

12. (Original) The phase offset circuit according to claim 11,

wherein the phase offset circuit can give an input signal 8 types of phase offset of $+180^\circ$, -135° , -90° , -45° , 0° , $+45^\circ$, $+90^\circ$ and $+135^\circ$.